

Biomarkers—Tricker suggestions

Nicotine (+ 8 metabolites) in urine

INBIFO or P. Jacob

NNK metabolites (NNAL + NNAL-Gluc) in urine

S. Hecht (University of Minnesota)
M. Meger (VdC laboratory Munich)

2,5-dimethylfuran (+ other VOC) in blood

Requires validation for suitability

CO exhaled breath / COHb

Not sensitive or specific, but needs to be determined

3-Hydroxypropylmercapturic acid urine

Biomarker for acrolein
E.R. Schmid (University of Vienna)

Aromatic amine (4-APB, 3-ABP + others) Hb adducts

4-ABP required
3-ABP probably more specific for smoking
One GC-MS run for at least 10 AA possible
INBIFO
S. Tannenbaum (MIT)

N-terminal cyanoethylvaline Hb adducts

Biomarker for acrylonitrile – associated with cpd
S. Osterman-Golkar (CIIT)
P. Farmer (MRC, Leicester, UK)
M. Meger (VdC laboratory Munich)

N-terminal hydroxyethylvaline Hb adducts

Nonspecific but associated with cpd
P. Farmer (MRC, Leicester, UK)